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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,161	12/21/2001	Uresh K. Vahalia	EMC-98-092 CON(1)	5930

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EMC CORPORATION
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EXAMINER

NGUYEN, DUSTIN

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/032,161

Applicant(s)

VAHALIA ET AL.

Examiner

Dustin Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50,52-61 and 63-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 50,52-61 and 63-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Claims 50, 52-61, 63-65 are presented for examination.

Information Disclosure Statement

2. Examiner requests Applicants to update status of any related cases as disclosed in the specification.

Claim Objections

3. Claim 61 is objected to because of the following informalities: spelling error "further" on line 9. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 61 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The claim language in the following claims is not clearly understood:

- I. As per claim 61, the following underline language on lines 6 and 7 is not clearly explain: “enabling the server to respond to a request for data from a client for access to that comprises at least a portion of the file”

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 50, 52-61, 63-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soltis [US Patent No 6,697,846], in view of Soltis et al. [US Patent No 6,493,804].

8. As per claim 50, Soltis discloses the invention substantially as claimed including a method of accessing data stored in a data storage location in a data storage device, the method comprising:

a server receiving from a client a request for accessing data related to a file [i.e. SFS software on the client makes a request for meta-data to the MFS server] [108, Figure 2; and col 8, lines 27-36], and wherein the server is in communication with a data storage device including data storage locations [108, 110, Figure 2; col 4, lines 17-28; and col 7, lines 52-59] and the

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server managing locks on files having data stored in the data storage device [col 15, lines 13-15; and col 16, lines 48-55],

in response to the request for data, the server returning to the client metadata of the file including information specifying a data storage location for the file [i.e. MFS returns the file to requested client] [col 4, lines 17-39; and col 8, lines 34-43] and granting to the client a lock on at least a portion of the file to be used when accessing data that is at least a portion of the file [col 9, lines 9-38; and col 12, lines 38-48].

Soltis does not specifically disclose

using the metadata of the file, the client producing at least one data access command for accessing the data storage location and sending the at least one data access command to the data storage device for accessing data stored on the data storage device that comprises at least a portion of the file for which the lock is granted.

Soltis et al. Discloses

using the metadata of the file, the client producing at least one data access command for accessing the data storage location [i.e. clients issue actions to the storage device to perform operations on the lock] [Abstract; and col 15, lines 27-39] and sending the at least one data access command to the data storage device for accessing data stored on the data storage device that comprises at least a portion of the file for which the lock is granted [i.e. client initiates Dlock command for accessing resource] [Figures 8A and 8B; col 14, lines 56-col 15, lines 4; and col 15, lines 27-40].

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Soltis and Soltis et al. because the accessed command to access the

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locking file of Soltis et al. would allow to prevent corruption from multiple accesses to maintain data integrity.

9. As per claim 52, Soltis discloses a plurality of clients share read-write access to the file, and the server grants respective read locks and write locks to the client [col 9, lines 9-38].

10. As per claim 53, Soltis discloses the client writes data to the data storage locations, modifies the metadata from server in accordance with the data storage locations to which the data is written, and sends the modified metadata to the server [Figure 3; and col 9, lines 14-38].

11. As per claim 54, Soltis discloses the client sends the modified metadata to the file server after the client writes the data to the data storage [236, 238, Figure 7; and col 12, lines 35-col 13, lines 12].

12. As per claim 55, Soltis discloses the client has a lock manager that responds to a request from an application process of the client for access to the file by granting to the application process a local file lock on at least a portion of the file; and then sending to the file server said at least one request for access to the file [col 16, lines 48-55].

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13. As per claim 56, it is rejected for similar reasons as stated above in claims 50 and 54.

Furthermore, Soltis discloses dynamically linking application programs of the client with input-output related operating system routines of the client [120, Figure 2; and col 4, lines 40-col 5, lines 4].

14. As per claim 57, it is rejected for similar reasons as stated above in claims 50 and 53.

15. As per claim 58, it is rejected for similar reasons as stated above in claim 54.

16. As per claim 59, Soltis discloses the client performs asynchronous write operations upon the data storage locations, and wherein the client sends the modified metadata to the server in response to a commit request from an application process of the client [i.e. update inode in MFS] [Figure 7; and col 12, lines 64-col 13, lines 11].

17. As per claim 60, Soltis discloses the client performs asynchronous write operations upon the data storage locations, and wherein the client sends the modified metadata to the file server when the client requests the file server to close the file [col 5, lines 35-40].

18. As per claim 61, it is program product claimed of claim 50, it is rejected for similar reasons as stated above in claim 50.

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19. As per claim 63, it is program product claimed of claim 52, it is rejected for similar reasons as stated above in claim 52.

20. As per claims 64 and 65, they are program product claimed of claims 53 and 54, they are rejected for similar reasons as stated above in claims 53 and 54.

21. Applicant's arguments with respect to claims 50, 52-61, 63-65 have been considered but are moot in view of the new ground(s) of rejection.

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

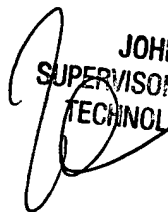
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Follansbee John can be reached on (571) 272-3968. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dustin Nguyen
Examiner
Art Unit 2154

 **JOHN FOLLANSBEE**
SUPERVISORY PATENT EXAMINER
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